

REMARKS

Upon entry of the present amendment, claims 1, 3, 4 and 6-8 will have been amended while claims 2 and 9 will have been canceled. Additionally, claims 10-16 will have been submitted for consideration by the Examiner.

In view of the herein contained amendments and remarks, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejection set forth in the above-mentioned Official Action together with an indication of the allowability of all the claims pending in the present application, in due course. Such action is respectfully requested and is now believed to be appropriate and proper.

Initially, Applicant respectfully thanks the Examiner for acknowledging his Claim of Priority under 35 U.S.C. § 119 and for confirming that the certified copy of the priority document has been received. Applicant further thanks the Examiner for confirming that the commonly assigned patent applications cited therein have been considered.

In the outstanding Official Action, the Examiner rejected all of claims 1-9 under 35 U.S.C. § 102(b) as being anticipated by HOSHINO et al. (U.S. Patent No. 5,933,222). Applicant respectfully traverses the above rejection and submits that it is inappropriate particularly with regard to the combination of features recited in Applicant's claims.

Applicant's invention is directed to a film scanner and in particular to a film scanner for reading an image formed on a film. The film scanner according to the present invention

includes an imaging device, a transport table and a single stepping motor. The single stepping motor is driven by a motor drive circuit that pulse drives the stepping motor in steps and the motor drive circuit enables micro-stepping control of the stepping motor. Accordingly, the motor drive circuit is configured to drive the single stepping motor in increments of a first step when the image is read in a pre-scan and to drive the single stepper motor in increments of second steps, smaller than the first step, by the micro-stepping control when the image is read in a main scan. It is respectfully submitted that at least the above-noted combination of features recited in Applicant's, e.g., claim 1, is not taught, disclosed nor rendered obvious by the HOSHINO et al. reference relied upon by the Examiner.

HOSHINO et al. is directed to a film scanner and a film scanner that is motor driven. However, the film scanner of HOSHINO et al. utilizes two motors 26 and 27. In this regard, the Examiner's attention is respectfully directed to column 5, lines 38-47. In particular, a first stepping motor 26 drives the carriers A and B at high speed and a second stepping motor 27 drives the stage 19 at a low speed. During the main scanning operation, the film is driven by the second stepping motor 27 to read data with a required high resolution. Thus, HOSHINO et al. utilizes two motors to provide the pre-scan and main scan drive.

In direct contrast, and as explicitly recited in claim 1, Applicant's invention utilizes a single motor. It is thus clear that Applicant's invention has significant advantages in terms of cost, weight and size. At least for this reason, it is respectfully submitted that the claims

in the present application are clearly patentable over the HOSHINO et al. reference relied upon by the Examiner.

Applicant's dependent claims provide yet additional bases for the patentability thereof in addition to those bases set forth in claim 1. In this regard, contrary to the Examiner's assertions and merely as an example, there is no indication that the motor drive circuit of HOSHINO et al. enables switching between the various phase excitation modes set forth in claim 4. Nor has the Examiner pointed to any particular portion of the HOSHINO et al. disclosure to teach this feature. Regarding the switch SW1 of Fig. 4, it does not provide switching between the phase excitation modes, as recited in claim 4 but is merely a reset switch for resetting the CPU 21. Accordingly, Applicant respectfully submits that all of the claims 1 and 3-8 are clearly patentable over the reference cited by the Examiner.

By the present Response, Applicant has submitted several additional claims for consideration by the Examiner. It is respectfully submitted that these claims also are patentable over the references of record in the present application. In particular, claims 10, 11 and 13 are directed to the relationship between the resolution and the scanning operation and the phase excitation mode. This feature is illustrated in Fig. 8 and the disclosure associated therewith. Accordingly, Applicant respectfully requests reconsideration of the outstanding rejection and an indication of the allowability of all of claims 1, 3-8 and 10-16.

SUMMARY AND CONCLUSION

Applicant has made a sincere effort to place the present application in condition for allowance and believes that he has now done so. Applicant has amended the claims to more clearly define the features of Applicant's invention. Applicant has further discussed the reference and has pointed out the shortcomings thereof. Applicant has discussed the features of Applicant's invention with particular attention to the recitations of the claims and has pointed out the shortcomings of the cited and applied reference with respect thereto. Accordingly, Applicant has provided a clear evidentiary basis supporting the patentability of all the claims in the present application and respectfully requests an indication to such effect in due course.

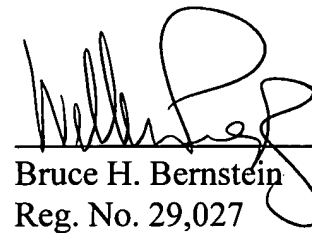
Applicant has submitted several additional claims for consideration and with respect to these claims, has pointed out a basis for the patentability thereof.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

P20273.A02

Should the Examiner have any questions or comments regarding this Response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
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